

GenCore version 4.5  
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OM nucleic - nucleic search, using sw model

Run on: February 3, 2000, 14:19:01 : Search time 2265.46 Seconds  
(without alignments)  
136.391 Million cell updates/sec

Title: US-08-962-560a-3  
Perfect score: 1235  
Sequence: 1 CGAGGCTCAACCTCCGGCGG.....AGAAAAAAAAAAAAAAAA 1235

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 311585 seqs, 125096042 residues

Total number of hits satisfying chosen parameters: 623170

Minimum DB seq length: 0  
Maximum DB seq length: 1000000

Post-processing: Minimum Match 0%  
Listing first 45 summaries

Database : N\_Geneseq\_36.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	1235	100.0	1 V38659	Mus musculus SOCS1
2	1084.4	87.8	1 V38659	Rattus norvegicus
3	1072.2	86.8	1 V42701	CDNA encoding a ST
4	990.2	55.9	1 V38662	Homo sapiens SOCS1
5	95.6	7.7	2342 1	Human EPRC1 CDNA #
6	95.6	7.7	2342 1	Human EPRC1 CDNA #
7	91.4	7.4	2187 1	Mus musculus SOCS3
8	87	7.0	2378 1	Human secreted pro
9	69.6	5.6	1374 1	Human cytokine-ind
10	64.4	5.2	114955 1	Human adenosine A1
11	53.8	4.4	114955 1	Human adenosine A1
12	53.8	4.4	114955 1	Human adenosine A1
13	50	4.0	43280 1	Tyrosine synthase
14	49.8	4.0	12001 1	HSV-2 strain SB5 C
15	49.8	4.0	117213 1	Nucleotide sequenc
16	49	4.0	799 1	Vector plasmid PCM
17	49	4.0	9600 1	Plasmid pCISBON f
18	49	4.0	10596 1	Plasmid pCISBON f
19	49	4.0	10596 1	Plasmid pCISBON f
20	49	4.0	10596 1	Plasmid pCISBON f
21	49	4.0	10596 1	Plasmid pCISBON f
22	48	3.9	795 1	Nucleotide sequenc
23	47.4	3.8	3198 1	FLGA insert stabl
24	46.2	3.7	12001 1	Human IL-1ra BAC c
25	46	3.7	8638 1	HSV L/ST region. H
26	45.2	3.7	835 1	DNA encoding pseud
27	45.2	3.7	847 1	Modified human adi
28	45.2	3.7	1093 1	Human adipisin/D cd
29	45	3.6	4897 1	Human adipisin gene
30	44.4	3.6	1680 1	Pseudotubercle virus
31	44.4	3.6	1722 1	Complete sequence
32	44.2	3.6	1266 1	Sequence of the co
33	44	3.6	201 1	Brd-3a polynucleot
34	43.8	3.5	833 1	Signal portion of snab gene encoding

35	43.8	3.5	1170 1	020217	Sequence of tuft3 g
36	43.6	3.5	1512 1	V23482	Pseudomonas xpr s
37	43.6	3.5	4356 1	037543	Cardiac adenylyl c
38	43.6	3.5	4356 1	037543	Cardiac adenylyl c
39	43.6	3.5	17612 1	V23494	Pseudomonas xpc, o
40	43.2	3.5	201 1	N70195	Streptomyces prote
41	43.2	3.5	3917 1	T31723	K-ras oncogene, pr
42	43.2	3.5	1601 1	T06981	S. clavuligerus ly
43	43	3.5	30001 1	T61016	Total DNA sequence
44	43	3.5	30001 1	X05110	S. aureofaciens DN
45	42.8	3.5	1121 1	V38660	Mus musculus SOCS2

## ALIGNMENTS

RESULT 1	V38659	standard; DNA; 1235 BP.
ID	V38659	
AC	27-OCT-1998 (first entry)	
DE	Mus musculus SOCS1 gene.	
KW	SOCS1; suppressor of cytokine signaling; PCR primer;	
KW	autoimmune disease; diagnosis; cancer; treatment;	
KW	cytokine mediated cellular responsiveness; hyperimmunity;	
KW	immunosuppression; allergies; hypertension; ss.	
OS	Mus musculus.	
FT	key	Location/Qualifiers
FT	CDS	161..799
FT	/*tag= a	/product= SOCS1 protein
FT	/*tag= a	/product= SOCS1 protein
PD	14-MAY-1998.	
PF	31-OCT-1997; AU0729.	
PR	14-FEB-1997; AU-005117.	
PR	01-NOV-1996; AU-003384.	
PA	(HALL-) HALL INST MEDICAL RES WALTER & ELIZA.	
PI	Alexander WS, Hilton DJ, Metcalf D, Nicholson SE,	
PI	Nicola NA, Richardson RT, Starr R, Viney EM, Willson TA;	
PI	WPI: 98-286854/25.	
DR	P-PDB: W62613.	
PT	Suppressor of cytokine signaling proteins - useful to treat	
PT	disease, injury or abnormality involving cytokine mediated cellular	
PT	responsiveness e.g. hyperimmunity, immunosuppression, allergies and	
PT	hypertension	
PS	Claim 14; Page 108-109; 325pp; English.	
CC	The sequence is that of a gene encoding a suppressor of cytokine	
CC	signaling protein (SOCS). SOCS can be used to screen for naturally	
CC	occurring antibodies to SOCS, which may occur, e.g. in some autoimmune	
CC	diseases. Alternatively, specific antibodies can be used to	
CC	screen for SOCS, which is useful as a knowledge of SOCS levels	
CC	may be important for the diagnosis of certain cancers. Injury or	
CC	SOCS polypeptides can be used to treat disease, injury or	
CC	abnormality involving cytokine mediated cellular responsiveness,	
CC	e.g. hyperimmunity, immunosuppression, allergies and hypertension.	
SO	Sequence 1235 BP; 192 A; 421 C; 347 G; 275 T;	

Query Match 100.0%; Score 1235; DB 1; Length 1235;  
Best Local Similarity 100.0%; Pred. No. 1.4e-245;  
Matches 1235; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	CGAGGCTCAAGCTCGGGGCGGATTGTGGTCCGCTCCGCTCTGTGGGCTGTGGCC	60
DB	1	CGAGGCTCAAGCTCGGGGCGGATTGTGGTCCGCTCCGCTCTGTGGGCTGTGGCC	60
QY	61	GACCGTGCACACCGGAGCGCCGCTCACTGCTGTCTGCCATCAGGCGACGCCCG	120
DB	61	GACCGTGCACACCGGAGCGCCGCTCACTGCTGTCTGCCATCAGGCGACGCCCG	120
QY	121	GACGCTATGAGCCACCCCTCAGCTGGCCCTCGAGTAGAGTAGTAGCAGCAGCAGT	180
DB	121	GACGCTATGAGCCACCCCTCAGCTGGCCCTCGAGTAGAGTAGTAGCAGCAGCAGT	180

Oy	181	GGCAGCCGCAAAATCGATCTCCCGGAGAGAGCCCGAGCGCGGTCTAGAGCCCTCTC	240
Oy	181	GGCAGCCGCAAAATCGATCTCCCGGAGAGAGCCCGAGCGCGGTCTAGAGCCCTCTC	240
Db	181	GGCAGCCGCAAAATCGATCTCCCGGAGAGAGCCCGAGCGCGGTCTAGAGCCCTCTC	240
Oy	241	GTGCTGCTCTGTCCTGCCAGCGGCCCCCGGTGCTGCCGGCCCTGCCGGGCTCC	300
Db	241	GTCTCTGCTCTGTCCTGCCAGCGGCCCCCGGTGCTGCCGGCCCTGCCGGGCTCC	300
Oy	301	AGCCCCAGCCCCCTGGCGACATCACTTCCGACCTCTCGCTCCACTCCGATTACGGGG	360
Db	301	AGCCCCAGCCCCCTGGCGACATCACTTCCGACCTTCCGCTCCACTCCGATTACGGGG	360
Oy	361	CATCAGCGGAGACAGCGGCGCTCTCGAGCGCTGCGGCTTCTATTGGGGAACCCGTAGCGT	420
Db	361	CATCAGCGGAGACAGCGGCGCTCTCGAGCGCTGCGGCTTCTATTGGGGAACCCGTAGCGT	420
Oy	421	GCACGGGGCGACAGAGGGGCGCTGCGCCGAGCCGTGTGGGACCTTCTGTGGCGACAG	480
Db	421	GCACGGGGCGACAGAGGGGCGCTGCGCCGAGCCGTGTGGGACCTTCTGTGGCGACAG	480
Oy	481	TGCTCAACGGAACGCTCTCTCGGCGCTCAGCGTGAAGATGGCTTGGGGCCCGCAGCAT	540
Db	481	TGCTCAACGGAACGCTCTCTCGGCGCTCAGCGTGAAGATGGCTTGGGGCCCGCAGCAT	540
Oy	541	CCGGGTGCATCTTCCAGAGCCGGCGCTTCCACTTGGACGCGACGCCGAGACCTTCGACTG	600
Db	541	CCGGGTGCATCTTCCAGAGCCGGCGCTTCCACTTGGAGGGAGCGGACGACCTTTCAGCTG	600
Oy	601	CGTTTTCAGCTGCTGTGAGACACTACGTGGGGGCGCGCGCGCATGTGGGGGCGCGCT	660
Db	601	CGTTTTCAGCTGCTGTGAGACACTACGTGGGGGCGCGCGCGCGCATGTGGGGGCGCGCT	660
Oy	661	GCGCCAGCGCGCGCTGCGGGCGGTGCGAGAGCTGTGTGCCAGCGCATGCTGCGCGCT	720
Db	661	GCGCCAGCGCGCGCTGCGGGCGGTGCGAGAGCTGTGTGTGCCAGCGCATGCTGCGCGCT	720
Oy	721	GGGTGCGGAGAACCTGGGGGCGCATCCCTTTAACCCGGTACTCGGTACACTGAGTTC	780
Db	721	GGGTGCGGAGAACCTGGGGGCGCATCCCTTTAACCCGGTACTCGGTACACTGAGTTC	780
Oy	781	CTTCCCTTCCAGATCTGACCGCGCTGCGGCTGCGCGCAGCAATTAACTGGGGGCGCTTA	840
Db	781	CTTCCCTTCCAGATCTGACCGCGCTGCGGCTGCGCGCAGCAATTAACTGGGGGCGCTTA	840
Oy	841	TTATTTCATTATTAAATTATATTATTTTTCGGAACACAGTGGGAGCCCTCCCGGCT	900
Db	841	TTATTTCATTATTAAATTATATTATTTTTCGGAACACAGTGGGAGCCCTCCCGGCT	900
Oy	901	GGGTGCGAGGAGTGTGTGTGAGAGGTGAGATGCCCTCCACTTCTGGCTGGAGACCTCAT	960
Db	901	GGGTGCGAGGAGTGTGTGTGAGAGGTGAGATGCCCTCCACTTCTGGCTGGAGACCTCAT	960
Oy	961	CCCACTCTCAGGGGTGGGGGTGCTCCCTCTGTGCTCTCCCTCCGGGTCCCGCGGAT	1020
Db	961	CCCACTCTCTCAGGGGTGGGGGTGCTCCCTCTGTGCTCTCCCTCCGGGTCCCGCGGAT	1020
Oy	1021	GTAGCAGCTTGTGTCTGGGGCGACAGACCTGAATTCACACTCCTACCTCTCATGTTTACAT	1080
Db	1021	GTAGCAGCTTGTGTCTGGGGCGACAGACCTGAATTCACACTCCTACCTCTCATGTTTACAT	1080
Oy	1081	ATTCCCACTATCTTGTGCACAACACAGGGGTGGGAGGGTCTGTGCTTCAATTTTCTGC	1140
Db	1081	ATTCCCACTATCTTGTGCACAACACAGGGGTGGGAGGGTCTGTGCTTCAATTTTCTGC	1140
Oy	1141	TGTGCAGAATATCCTATTATTTTATTTTACGCGCAGTTTAGTAACTTATATATGA	1200
Db	1141	TGTGCAGAATATCCTATTATTTTATTTTACGCGCAGTTTAGTAACTTATATATGA	1200
Oy	1201	AAAGTTTTTTTTTAAAGAAAAAAAAAAAAAAAAAAAAA 1235	
Db	1201	AAAGTTTTTTTTTAAAGAAAAAAAAAAAAAAAAAAAAA 1235	

RESULT	2
ID	V38663
AC	V38663 standard; DNA; 2807 BP.
DT	27-OCT-1998 (first entry)
DE	Rattus norvegicus Socs1 gene.
KW	Socs1; suppressor of cytokine signaling; PCR primer;
KW	autoimmune disease; diagnosis; cancer; treatment;
KW	cytokine mediated cellular responsiveness; hyperimmunity;
KW	immunosuppression; allergies; hypertension; ss.
OS	Rattus norvegicus
EH	Key
FT	Location/Qualifiers
FT	1739..2377
FT	/tag= a
FT	/product= Socs1 protein
PN	W09820023-A1.
PD	14-MAY-1998.
PF	31-OCT-1997; AN0729.
PR	14-FEB-1997; AU-005117.
PR	01-NOV-1996; AU-003384.
PA	(HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
PI	Alexander WS, Hilton DJ, Metcalf D, Nicholson SE,
PI	Nicola NA, Richardson RT, Starr R, Vaney EM, Willson TA;
DR	WPI: 98-286854/25.
DR	P-PSDB; W62617.
PT	Suppressor of cytokine signaling proteins - useful to treat
PT	disease, injury or abnormality involving cytokine mediated cellular
PT	responsiveness e.g. hyperimmunity, immunosuppression, allergies and
PT	hypertension
PS	claim 14; Page 117-118; 325pp; English.
CC	The sequence is that of a gene encoding a suppressor of cytokine
CC	signaling protein (SOCs). SOCs can be used to screen for naturally
CC	occurring antibodies to SOCs, which may occur, e.g. in some autoimmune
CC	diseases. Alternatively, specific antibodies can be used to
CC	screen for SOCs, which is useful as a knowledge of SOCs levels
CC	may be important for the diagnosis of certain cancers. Soluble
CC	SOCs polypeptides can be used to treat disease, injury or
CC	abnormality involving cytokine mediated cellular responsiveness,
CC	e.g. hyperimmunity, immunosuppression, allergies and hypertension.
CC	Sequence 2807 BP; 507 A; 899 G; 495 T;

Query Match	87.88%	Score 1084.4	DB 1	Length 2807
Best Local Similarity	94.4%	Pred. No. 1.6e-214		
Matches 1159	Conservative	0	Mismatches 61	Indels 8
				Gaps 3
QY 1	CGAGCCTCAACCTCCGGGCGGATTCGTGCGTCCGCGCTTCCTCCGCTTATGGGGGTCTGTGGCC	60		
Db 1579	CGAGGCTTAGGCTCCGGGCGGATTCGTGCGTCCGCGCTTCCTCCGCTTATGGGGGTCTGTGGCC	1638		
QY 61	GAGCTGTGCAACCGGAGCGCCGGCTCACTGCTCTGTCTTCCCATAGCGACGCCCG	120		
Db 1639	GAGCTGTGCAACCGGAGCGCCGGCTCACTGCTCTGTCTTCCCATAGCGACGCCCG	1698		
QY 121	GACGCTATGGCCCAACCCCTCCAGCTGCGGCCCTCCAGTAGAGATGGTAGACGCAACCAAGT	180		
Db 1699	GACGCTATGGCCCAACCCCTCCAGCTGCGGCCCTCCAGTAGAGATGGTAGACGCAACCAAGT	1758		
QY 181	GGACGGCGACATGGGATCTCCCGGGAGACAGAGCCCGGAGGGGGGTAGAGACCCCTCCTC	240		
Db 1759	GGAAAGCCACATGGGATCTCCCGGGAGACAGAGCCCGGAGGGGGGTAGAGACCCCTCCTC	1818		
QY 241	GTCCTGCTTCGTGCTCTGCGACGCGGCCCGGTGGGTCCCGGACCTCCCGCGGGCTCC	300		
Db 1819	GTCCTGCTTCGTGCTCTGCGGCGGGCGGGCCCGGCGGGTCTCCCGGCGGTCTCCCGGGTCTCC	1878		
QY 301	AGCCCGACCCCTGGCGGACACTCACTTCGCGACCTTCGCTCCACTCCGATTCAGTACGGGG	360		
Db 1879	GGCCCCGGGCTCGGGGCGACACTCACTTCGCGACCTTCGCGCTCCACTCCGATTCAGTACGGGG	1938		
QY 361	CATCAGCGGACGACGCGGCTCTGGAGCGCTCGGGCTTCTATTGGGGACCCCTTAGCGCT	420		

D	1939	CACACGGGAGCAGCGCTCTCCGTGGACGGCTGCGGCTTCTACTGGGAGACCCCTAGGCT	1998
Q	421	GCACGGGGCGACAGACGGCGCTGGGTGGCCGACCCCGTGGGACCTCTTGTGTGGCAGAC	480
D	1999	GCATGGGGCGCACACAGAGCGGTGGCTTCCGAAACCCGTGGGACACTTCTTGTGTGGCAGAC	2058
Q	481	TGCTCAACGAAACTGCTTCTTCCGGCTCACGCTGAAGATAGGGCTGGGGGCCACAGACAT	540
D	2059	TGCGCAGGGGAACTGCTTCTTCCGGCTCACGCTGAAGATAGGCTTGGGGGCCACAGACAT	2118
Q	541	CCGGGTGCACTTCCAGGCGGGCGGCTTCCACTTGGACGGGACCGGAGACCTTGGACTG	600
D	2119	TGCTGTGCACTTCCAGGCGGGCGGCTTCCACTGACGAGCAACGGGAGACCTTGGACTG	2178
Q	601	CCCTTTGCACTGCTGGAGACATACGTGGGGGGGGCGGGCGGCGCATGTTGGGGGGCCCGCT	660
D	2179	CCCTTTGCACTGCTGGAGACATACGTGGGGGGGGCGGGCGGCGCATGTTGGGGGGCCCGCT	2238
Q	661	GGCGACAGCGCCGCTGGGGCGGCTGGACGAGAGCTGTCTCCAGCAGCATGTGGCCGCGCT	720
D	2239	GGCGACAGCGCCGCTGGGGCGGCTGGACGAGAGCTGTCTCCAGCAGCATGTGGCCGCGCT	2288
Q	721	GGGTGGGAGAACCTGGCGCGCATCCCTCTTAACCCGGTACTGCGTGACTACGTGAATTC	780
D	2299	GGGTGGGAGAACCTGGCGCGCATCCCTCTTAACCCGGTACTGCGTGACTACGTGAATTC	2358
Q	781	CTTCCGCTTCCAGATCTGACCGGGTGGCGCTGGG - CCGAGATTAATGTTGGGGGGCTT	839
D	2359	CTTCCGCTTCCAGATCTGACCGGGTGGCGCTGGG - CCGAGATTAATGTTGGGGGGCTT	2418
Q	840	ATTAATTTCTTAATTAATTAATTAATTAATTTTCTGAAACACAGTGGAGCCCTCCCGCC	899
D	2419	ATTAATTTCTTAATTAATTAATTAATTAATTTTCTGAAACACAGTGGAGCCCTCCCGCC	2478
Q	900	TGGGTGGAGGAGGTGGTGTGGAGGGGTAGATGCTCTCCACTTCTGGCTGGAGACTCA	959
D	2479	TAGGTGGAGGAGGTGGTGTGGAGGGGTAGATGCTCTCCACTTCTGGCTGGAGACTCA	2538
Q	960	TCCGACCTCTCAGGGGTGGGGGTGTCTCCGCTCTGGTGTCTCCCTCCGGGTCCGCGTGT	1019
D	2539	TCCGACCTCTCAGGGGTGGGGGTGTCTCCGCTCTGGTGTCTCCCTCCGGGTCCGCGTGT	2591
Q	1020	TGTAGCAGCTGTGTCTGGGGCCAGGACCTGAATTCACCTCTACCTCTCCATGTTACA	1079
D	2592	TGTAGCAGCTGTGTCTGGGGCCAGGACCTGAATTCACCTCTACCTCTCCATGTTACA	2651
Q	1080	TATCCACGATCTTTGGACAAACACAGGGGTGGGGAGGGTCTCGGCTCATTTTCTG	1139
D	2652	TGTTCACGATCTTTGGACAAACACAGGGGTGGGGAGGGTCTCGGCTCATTTTCTG	2711
Q	1140	CTGTGCAAAATCTAATTTAATTTTACAGCCAGTTAGGTAAATACTTAATATG	1199
D	2712	CTGTGCAAAATCTAATTTAATTTTACATCAAGTTAGGTAAATACTTAATATG	2771
Q	1200	AAAGTTTTTTTAAAGAAAAAAA 1227	
D	2772	AAAGTTTTTTTAAAGAAAAAAA 2799	

RESULT	3
V42701	
ID	V42701 standard; cDNA; 1087 BP.
AC	V42701;
DT	30-OCT-1998 (first entry)
DE	cDNA encoding a STAT function regulatory protein designated SIIS-1
SI	SIIS-1; STAT-induced inhibitor; STAT function;
KW	JAK/STAT signal transduction system; STAT; STAT6; inhibi;
KW	tyrosine phosphorylation; gp130; cytokine-regulating protein; CS;
KW	screen; cytokine regulatory; inhibitory activity; ds.
OS	mus sp.
FH	
FT	Location/Qualifiers
CDS	16..654
FT	/*tag_a

PN WO8830688-A1.  
PD 16-JUL-1998.  
PF 23-OCT-1997; J03860.  
PR 10-JAN-1997; JP-014737.  
PA (KISHU/) KISHIMOTO T.  
PI Naka T.  
DR WPI: 98-399137/34.  
PT P-PSDB: W70962.  
PT STAR function regulatory protein - used in screening candidate  
PT substances for cytokine regulatory activity  
PS Claim 5; Pages 39-41; 60pp; Japanese.  
CC The present sequence encodes a protein (designated SIRS-1, SPAT-induced  
CC inhibitor of STAR function 1) which regulates STAR protein function in  
CC the JAK/STAT signal transmission system in mammalian cells. The protein  
CC is induced by SIRS-1 or STAT6. It inhibits tyrosine phosphorylation of  
CC SIRS-1 and of gp130. The SIRS-1 protein sequence contains an SH2 domain  
CC and is related to the cytokine-regulating protein CIS. SIRS-1, or  
CC transformant cells expressing it, may be used to screen candidate  
CC substances for cytokine regulatory or inhibitory activity.  
SQ Sequence 1087 BP; 171 A; 363 C; 305 G; 248 T;

Query Match	86.88;	Score 1072.2;	DB 1;	Length 1087;
Best Local Similarity	99.38;	Pred. No. 4.1e-212;		
Matches 1077; Conservative	0;	Mismatches 8;	Indels 0;	Gaps 0;

QY	146	GGCCCTCGACATAGATAGTGTAGCAGCAACAGAGTGGACGCCAGTATGGATCTCCCG	205
Db	1	GGCCCTCGACATAGATAGTGTAGCAGCAACAGAGTGGACGCCAGTATGGATCTCCCG	60
QY	206	GCAGCAGAGCCCGCAGAGCGGCTCAGAGCCCTCTGTCCTTGCTTCCTCGCAGCG	265
Db	61	GCAGCAGAGCCCGCAGAGCGGCTCAGAGCCCTCTGTCCTTGCTTCCTCGCAGCG	120
QY	266	GCCCCCGAGCTGCCCGAGCCCTGCCCGGAGTCCACCCAGCCCGCTGGGGAACACAC	325
Db	121	GCCCCCGAGCTGCCCGAGCCCTGCCCGGAGTCCACCCAGCCCGCTGGGGAACACAC	180
QY	326	TTCCGCACCTTCGCGCTCCACATCCGATTAACGGGCGATCAAGGGACAGCGCGCTCTG	385
Db	181	TTCCGCACCTTCGCGCTCCACATCCGATTAACGGGCGATCAAGGGACAGCGCGCTCTG	240
QY	386	GAGCGCTGGCGGCTCTATATGGGGAGACCCCTAGAGCTGCACGGGGGGGACAGAGCGGCTCGT	445
Db	241	GAGCGCTGGCGGCTCTATATGGGGAGACCCCTAGAGCTGCACGGGGGGGACAGAGCGGCTCGT	300
QY	446	GCCGAGCCCGTGGGGCACCTTTGTCGGGACAGTGTGTAACGGAACTCTTTTGGCG	505
Db	301	GCCGAGCCCGTGGGGCACCTTTGTCGGGACAGTGTGTAACGGAACTCTTTTGGCG	360
QY	506	CTCAGCGTGAAGATGCTTGGGGCCCCAGAGCATCCGCGTGCACTTCCAGGCCGGCCGC	565
Db	361	CTCAGCGTGAAGATGCTTGGGGCCCCAGAGCATCCGCGTGCACTTCCAGGCCGGCCGC	420
QY	566	TTCCACTTGGACGGCACCGCAGAGACTTGTGACTGCTTTTCGAGCTGCGAGACATAC	625
Db	421	TTCCACTTGGACGGCACCGCAGAGACTTGTGACTGCTTTTCGAGCTGCGAGACATAC	480
QY	626	GTCGGGCGCGCGCGCATGTTGGGGCCCCGCTGCGCAGCGCGCGTGGCGCGCTG	685
Db	481	GTCGGGCGCGCGCGCATGTTGGGGCCCCGCTGCGCAGCGCGCGTGGCGCGCTG	540
QY	686	CAGAGGTGTGTGGCCAGCGCATGTGGGCCGCGGTGGTGGCAGAACTGGGGCGATC	745
Db	541	CAGAGGTGTGTGGCCAGCGCATGTGGGCCGCGGTGGTGGCAGAACTGGGGCGATC	600
QY	746	CTCTTTAACCCTGACTCCGTGACTACTAGTTCCTTCCCTTCAGACTGACCGGCT	805
Db	601	CTCTTTAACCCTGACTCCGTGACTACTAGTTCCTTCCCTTCAGACTGACCGGCT	660
QY	806	GGCGCTGTGGCCAGCATTAAGTGGGGCGCTTATATTCTTATTAATTATTAATTAT	865
Db	661	GGCGCTGTGGCCAGCATTAAGTGGGGCGCTTATATTCTTATTAATTATTAATTAT	720

QY	866	ATTATTTGTGAGACAGTGGAGACCCCTCCCGGCTGGTGGAGGAGAGTGTGGAGG	925
Db	721	ATTATTTGTGAGACAGTGGAGACCCCTCCCGGCTGGTGGAGGAGAGTGTGGAGG	780
QY	926	GTGAGATGATCCCTCCACTTCTGAGCTGGAGAGACCTCATCCACCTCTCAGGGGTGGGGTCT	985
Db	781	GTGAGATGATCCCTCCACTTCTGAGCTGGAGAGACCTCATCCACCTCTCAGGGGTGGGGTCT	840
QY	986	CCCCCTGCTGGTCCCTCCGGGTCGCCCGCTGGTGTATACACTGTGTGGGGCCAGG	1045
Db	841	CCCCCTGCTGGTCCCTCCGGGTCGCCCGCTGGTGTATACACTGTGTGGGGCCAGG	900
QY	1046	ACCTGATTTCCACCTCCTACCTCTCCATATGTTATCATATTTCCAGTATCTTGGCACAACCA	1105
Db	901	ACCTGATTTCCACCTCCTACCTCTCCATATGTTATCATATTTCCAGTATCTTGGCACAACCA	960
QY	1106	GGGGTGGGAGGGTCTCTGGCTTCAATTTTCTGCTGTGCAGAAATATCTTATATTT	1155
Db	961	GGGGTGGGAGGGTCTCTGGCTTCAATTTTCTGCTGTGCAGAAATATCTTATATTT	1020
QY	1166	TTTACAGCCAGTTAGGTATATAACCTTTATGAAGAATTTTATTAAGAAAAA	1225
Db	1021	TTTACAGCCAGTTAGGTATATAACCTTTATGAAGAATTTTATTAAGAAAAA	1080
QY	1226	AAAAA 1230	
Db	1081	AAAAA 1085	
RESULT	4		
ID	V38662		
AC	V38662	standard; DNA; 1094 BP.	
AD	V38662		
DT	27-OCT-1998	(first entry)	
DE	Homo sapiens SOCS1 gene.		
KW	SOCS1; suppressor of cytokine signaling; PCR primer;		
KW	autoimmune disease; diagnosis; cancer; treatment;		
KW	cytokine mediated cellular responsiveness; hyperimmunity;		
KW	immunosuppression; allergies; hypertension; ss.		
OS	Homo sapiens.		
FH	Key	Location/Qualifiers	
FT	CDS	24..659	
FT		/*tag= a	
FT		/Product= SOCS1 protein	
PN	NC09820023-A1.		
PD	14-MAY-1998.		
PE	31-OCT-1997; AU0729.		
PR	14-FEB-1997; AU-005117.		
PR	01-NOV-1996; AU-003384.		
PA	(HALL-) HALL INST MEDICAL RES WALTER & ELIZ.		
PI	Alexander WS, Hilton DJ, Metcalf D, Nicholson SE,		
PI	Nicola NA, Richardson RT, Stear R, Viney EM, Willson TA;		
DR	MP1: 98-286854/25.		
DR	P-PSDB: W62616.		
PT	Suppressor of cytokine signaling proteins - useful to treat		
PT	disease, injury or abnormality involving cytokine mediated cellular		
PT	responsiveness e.g. hyperimmunity, immunosuppression, allergies and		
PT	hypertension		
PS	Claim 14; Page 115-116; 325pp; English.		
CC	The sequence is that of a gene encoding a suppressor of cytokine		
CC	signaling protein (SOCS). SOCS can be used to screen for naturally		
CC	occurring antibodies to SOCS, which may occur, e.g. in some autoimmune		
CC	diseases. Alternatively, specific antibodies can be used to		
CC	screen for SOCS, which is useful as a knowledge of SOCS levels		
CC	may be important for the diagnosis of certain cancers. Soluble		
CC	SOCS polypeptides can be used to treat disease, injury or		
CC	abnormality involving cytokine mediated cellular responsiveness,		
CC	e.g. hyperimmunity, immunosuppression, allergies and hypertension.		
QO	Sequence 1094 BP; 167 A; 381 C; 313 G; 233 T;		

Query Match 55.98; Score 690.2; DB 1; Length 1094;

	Best Local Similarity	83.5%;	Pred. No. 1,46-133;	
	Matches	924;	Conservative 0;	Mismatches 148; Indels 35; Gaps 11;
QY	138	CTCCAGCTGGCCCTCCGATGAGATGGTATGAGACGCAACCCAGAGTGGCACCCGACATATGCGA	197	
Db	1	CTCCGGGCTGGCCCTCTTCGTGATGGATGGATGACACACMACACAGATGGCACCGCAATATGCG	60	
QY	198	TCTCCCGGAGACAGAGCCCGGACGGGGGTATAGAGCCCTCCGTCCTGCTCTTGTGTCT	257	
Db	61	TCTCCACAGCAGACAGAGCCCGGACGGGGGTATAGAGCCCTCCGTCCTGCTCTTGTGTCT	117	
QY	258	CGCCAGCGGCCCGGCTGGCGTCCCGGCCCTCCGGCGGTGCCAGGCCCGGACCCCTGGCG	317	
Db	118	CGCCCGGGGGCCCGGCGGGGCCCGGGCGGTCCCGCGGGTCCCGGCCCGGGGGGGGGGG	177	
QY	318	ACACTCACTTCCGACCTTCGGCTCCACTTCGATTAACGGGCGATACGCGGACACGG	377	
Db	178	ACAGCACTTCCGACATTCGTTGCGACGCGCGATTAACGGGCGGATCAAGCGCGCACAG	237	
QY	378	CGCTCCGAGAGCCGCTGGCGGCTCTATATGGGGAGCCCGTAGGGGTGACAGGGGGGACAGAG	437	
Db	238	CGCTCCGAGAGCCGCTGGCGGATTCATATGGGGGGCCCTTAGGGTGCACGGGGGGACAGAG	297	
QY	438	GGCTGCGTGGAGCCCGGCGGACCTTCCTTGATGCGAGACAGTGTACAGGAACTGCT	497	
Db	298	GGCTGCGGCGGAGCCCGTGGGCACTTCCTGATGCGGAGACGCGGCAAGGGAATGCT	357	
QY	498	TCTTGGCGCTACGCGTGAAGATGGCTTCGGGCCCCACAGAGCATCCGCGTGCACTTCAGG	557	
Db	358	TCTTGGCGCTTACGCGTGAAGATGGCTTCGGGACCCACAGCATCCGCGTGCACTTCAGG	417	
QY	558	CGGGCGGCTTCCACTTGGAGGAGCGGACGCGGACCTTGAGCGCTTTTCGAGCTGCGAG	617	
Db	418	CGGGCGGCTTCCACTTGGATGGATGGAGCGCGGAGAGCTTGAGCTGCTTCCTTCGAGCTGCTG	477	
QY	618	AGCACTAGTGGGCGCGCGCGCATGTGGGGGCCCGCGTGGCCAGCGCGCGCTGC	677	
Db	478	AGCACTAGTGGGCGCGCGCGCATGTGGGGGGCCCGCGTGGCCAGCGCGCGCTGC	537	
QY	678	GGCGGCTGACGAGAGCTGTGTGCCACAGCGCATGATGCGCGCGGTGGGTGCGAAGACTGG	737	
Db	538	GGCGGCTGACGAGAGCTGTGTGCCACAGCGCATGATGCGCGCGGTGGGTGCGAAGACTGG	597	
QY	738	CGCGGATCCCTTAACCCGGGTACCGGTGACTGACTACCTAGTATCTTCCCTTCAGATCT	797	
Db	598	CTCGATCCCTTCAACCCCGCTCTCCGCGACTACTAGTATCTTCCCTTCAGATCT	657	
QY	798	GACCGGCTGCGGCTGTGCGGAGCATTAAGTGGGGGCCCTTATATTTCTATATTTAA	857	
Db	658	GACCGGAGCGCCCGCGCGTGCAGCGACATTAACGTGGGATGCCGTATATTT-----	709	
QY	858	TTATATATATTTTCTGGAACCAACGTGGAGCCCTCCCG-CCCTGGGTGCGAGGAGTGG	916	
Db	709	TTGTATATATTTTCTGGAACCAACGTGGGATCCCTCCCGGCTGGGTGGAGGAGGCGG	768	
QY	917	TTTGTG---GAAGGTGAATGGCTCCCACTTGTGGTGGAGA-----CCTCAATCCACATC	968	
Db	769	ATGGGTGTAGGGGGGAGGCGGCTCCCGGCTTCGGGTGGAGACAGGCGCGACAGCCCTTC	828	
QY	969	TCAAGGGGGGGGGTGGCT---CCCTCCGTGGTGTCTCCCTCGGGGTCGCC-CTGGTGT	1022	
Db	829	TCACCTCTTGAAGGGGGTCTCCCTCTGGTGTCTCCCTCTGGGTGGGTGGGTGGTGT	888	
QY	1023	AGCAGCT---TGTGTCTGGGGGCGAGGACGTGAAT--CCACTCTACCTCTCCATGTTT	1076	
Db	889	AGCAGCTTATGTATCTGAGACGAGGACGTGAATCGCACCTCTACCTCTCTCATGTTT	948	
QY	1077	ACATATTTCCAGATCTTTGACAAACCAAGGGG-TCGGGGAGGGTCTGTGGCTTATTTT	1135	
Db	949	ACATATATCCAGATCTTTTGCACAAACCAAGGGGTGGGGAGGGCTCTGTGGCTTATTTT	1008	
QY	1136	TCTGTGTGCGAATATCTTTTATTTTTCAGCGACATTTAGTAATAACTTAT	1195	

DB 1009 TCTGCTGTCAGATCCATTTATAT-TTTTAAAGTCATTAGTAATAACTTAT 1067  
OY 1196 TATGAAGTTTTTTTAAAGAAAA 1222  
DB 1068 TATGAAGTTTTTTTAAAGAAAA 1094

RESULT 5  
V69307  
ID V69307 standard; cDNA; 2342 BP.  
AC V69307;  
DE 01-FEB-1999 (first entry)  
KW Human EPRG1 cDNA #1.  
KW EPRG1: EPO primary response gene 1; diagnosis; gene therapy; immunity;  
KW disease; vaccine; inoculate; antibody; T cell; anaemia; polycythemia;  
KW cancer; neutropenia; AIDS; diabetes; myelosuppression; allergy; asthma;  
KW autoimmune disease; inflammatory disease; chromosome mapping; human; ss.  
OS Homo sapiens.  
PN EP-877030-A2.  
PD 11-NOV-1998.  
PF 07-MAY-1998; 303597.  
PR 01-MAY-1998; US-071342.  
PS 07-MAY-1997; US-043890.  
PA (SMIR ) SMITHKLINE BECKMAN CORP.  
PI Dillion S, Lord K;  
DR WPI: 98-570499/49.  
PT New EPO primary response gene polypeptides and polynucleotides -  
PT useful as diagnostic reagents and for prevention and treatment of  
PT cancer and autoimmune and inflammatory diseases  
PS Claim 14; Page 18-19; 25pp; English.  
CC This sequence encodes a novel human EPO primary response gene 1 (EPRG1)  
CC polypeptide. EPRG1 polypeptides and polynucleotides are useful for  
CC diagnosing a disease or susceptibility to a disease by detecting  
CC mutations in the EPRG1 gene using probes containing the EPRG1 nucleotide  
CC sequence, or determining EPRG1 polypeptide or mRNA expression levels  
CC EPRG1 polypeptides can be used to screen for agonists and antagonists  
CC which bind the EPRG1 polypeptide by measuring resulting mRNA levels with  
CC ELISA. These can be used in treatment to activate (agonist) or inhibit  
CC (antagonist eg EPRG1 ligand, receptor or substrate) EPRG1 activity, in  
CC addition to direct administration of antisense sequences to prevent  
CC expression, or EPRG1 polypeptides to treat conditions associated with  
CC a lack of EPRG1 protein. Gene therapy may also be used to affect  
CC endogenous EPRG1 polypeptide production. EPRG1 antibodies are useful for  
CC inducing an immune response to immunise and prevent diseases, and for  
CC isolating EPRG1 clones or purifying the polypeptides by affinity  
CC chromatography. EPRG1 polypeptides can be administered directly or as a  
CC vaccine to inoculate against disease by inducing an antibody and T-cell  
CC response. Diseases diagnosed, prevented or treated include anaemia,  
CC polycythemia, cancer, neutropenia, AIDS, drug-induced anaemia, diabetes,  
CC myelosuppression, autoimmune diseases, rheumatoid arthritis and multiple  
CC sclerosis, and inflammatory diseases, including asthma and allergies.  
CC EPRG1 polypeptide is also useful for mapping the gene to a chromosome,  
CC allowing gene inheritance to be studied through linkage analysis. The  
CC 3'-UTR segment of EPRG1 RNA may be useful to screen for agents which  
CC modulate RNA stability and turnover rate.  
SO Sequence 2342 BP; 495 A; 685 C; 655 G; 506 T;

Query Match 7.7%; Score 95.6; DB 1; Length 2342;  
Best Local Similarity 59.6%; Pred. No. 3e-11;  
Matches 161; Conservative 0; Mismatches 109; Indels 0; Gaps 0;

OY 323 CACTTCCGACCTTCGCTCCCATCCGATTCACGGCGCATCAGCGGACCGCGCTC 382  
DB 88 CGCCTCAAGACCTTCAGTCCCAAGAGCGAGTACGCTGGTGAACGCGAGTCCGCAAG 147  
OY 383 CTGAGACCTTCGCTTCATTTGGGAGCCCTGAGCGTGCAGCGGCGACAGCGGCTG 442  
DB 148 CTGAGAGAGAGCGGCTTACTGAGCGAGTACGCGGCGGAGGGAACCTCTGCTC 207  
OY 443 CGTGGCAGAGCCGCTGCGACCTTCTGTGGCGACAGTCTCAACGGAACCTGCTTCTC 502

DB 208 AGTGCCGAGCCCGCGGACCTTCTGATCCGCGACAGCTCGACACAGCCGACCTTCTC 267  
OY 503 GCGCTCAGCGTGAAGATGCTTGGGCCCCACAGCATCCCGCTGCATCTCCAGCGGCG 562  
DB 268 ACGCTCAGCGTGAAGATCCAGTCCGAGTCTGGGACCAAGACCTGCGATCTGAGGGGGCG 327

OY 563 GCGTTCACCTTGGAGCGGCGAGGACG 592  
DB 328 AGCTTCTCTGTCAGAGCGATCCCGGAGC 357

RESULT 6  
V69309  
ID V69309 standard; cDNA; 2342 BP.  
AC V69309;  
DE 01-FEB-1999 (first entry)  
KW Human EPRG1 cDNA derived from expressed sequence tags, EST's.  
KW EPRG1: EPO primary response gene 1; diagnosis; gene therapy; immunity;  
KW disease; vaccine; inoculate; antibody; T cell; anaemia; polycythemia;  
KW cancer; neutropenia; AIDS; diabetes; myelosuppression; allergy; asthma;  
KW autoimmune disease; inflammatory disease; chromosome mapping; human;  
KW expressed sequence tag; EST; ss.  
OS Homo sapiens.  
PN EP-877030-A2.  
PD 11-NOV-1998.  
PF 07-MAY-1998; 303597.  
PR 01-MAY-1998; US-071342.  
PS 07-MAY-1997; US-043890.  
PA (SMIR ) SMITHKLINE BECKMAN CORP.  
PI Dillion S, Lord K;  
DR WPI: 98-570499/49.  
PT New EPO primary response gene polypeptides and polynucleotides -  
PT useful as diagnostic reagents and for prevention and treatment of  
PT cancer and autoimmune and inflammatory diseases  
PS Claim 13; Page 22-23; 25pp; English.  
CC This sequence encodes a novel human EPO primary response gene 1 (EPRG1)  
CC polypeptide derived from expressed sequence tags (EST's). EPRG1  
CC polypeptides and polynucleotides are useful for diagnosing a disease or  
CC susceptibility to a disease by detecting mutations in the EPRG1 gene  
CC using probes containing the EPRG1 nucleotide sequence, or determining  
CC EPRG1 polypeptide or mRNA expression levels EPRG1 polypeptides can be  
CC used to screen for agonists and antagonists which bind the EPRG1  
CC polypeptide by measuring resulting mRNA levels with ELISA. These can be  
CC used in treatment to activate (agonist) or inhibit (antagonist eg EPRG1  
CC ligand, receptor or substrate) EPRG1 activity, in addition to direct  
CC administration of antisense sequences to prevent expression, or EPRG1  
CC polypeptides to treat conditions associated with a lack of EPRG1 protein.  
CC Gene therapy may also be used to affect endogenous EPRG1 polypeptide  
CC production. EPRG1 antibodies are useful for inducing an immune response  
CC to immunise and prevent diseases, and for isolating EPRG1 clones or  
CC purifying the polypeptides by affinity chromatography. EPRG1 polypeptides  
CC can be administered directly or as a vaccine to inoculate against disease  
CC by inducing an antibody and T-cell response. Diseases diagnosed,  
CC prevented or treated include anaemia, polycythemia, cancer, neutropenia,  
CC AIDS, drug-induced anaemia, diabetes, myelosuppression, autoimmune  
CC diseases, rheumatoid arthritis and multiple sclerosis, and inflammatory  
CC diseases, including asthma and allergies. The EPRG1 polypeptide is also  
CC useful for mapping the gene to a chromosome, allowing gene inheritance to  
CC be studied through linkage analysis. The 3'-UTR segment of EPRG1 RNA may  
CC be useful to screen for agents which modulate RNA stability and turnover  
CC rate.  
SO Sequence 2342 BP; 495 A; 685 C; 655 G; 506 T;

Query Match 7.7%; Score 95.6; DB 1; Length 2342;  
Best Local Similarity 59.6%; Pred. No. 3e-11;  
Matches 161; Conservative 0; Mismatches 109; Indels 0; Gaps 0;

OY 323 CACTTCCGACCTTCGCTCCCATCCGATTCACGGCGCATCAGCGGACCGCGCTC 382  
DB 88 CGCCTCAAGACCTTCAGTCCCAAGAGCGAGTACGCTGGTGAACGCGAGTCCGCAAG 147  
OY 383 CTGAGACCTTCGCTTCATTTGGGAGCCCTGAGCGTGCAGCGGCGACAGCGGCTG 442





23-MAY-1997: US-047599.  
 PR 23-MAY-1997: US-047600.  
 PR 23-MAY-1997: US-047601.  
 PR 23-MAY-1997: US-047612.  
 PR 23-MAY-1997: US-047613.  
 PR 23-MAY-1997: US-047614.  
 PR 23-MAY-1997: US-047615.  
 PR 23-MAY-1997: US-047616.  
 PR 23-MAY-1997: US-047617.  
 PR 23-MAY-1997: US-047618.  
 PR 23-MAY-1997: US-047632.  
 PR 23-MAY-1997: US-047633.  
 PR 06-JUN-1997: US-048964.  
 PR 06-JUN-1997: US-048974.  
 PR 22-AUG-1997: US-056630.  
 PR 22-AUG-1997: US-056631.  
 PR 22-AUG-1997: US-056632.  
 PR 22-AUG-1997: US-056636.  
 PR 22-AUG-1997: US-056637.  
 PR 22-AUG-1997: US-056662.  
 PR 22-AUG-1997: US-056664.  
 PR 22-AUG-1997: US-056845.  
 PR 22-AUG-1997: US-056862.  
 PR 22-AUG-1997: US-056864.  
 PR 22-AUG-1997: US-056872.  
 PR 22-AUG-1997: US-056874.  
 PR 22-AUG-1997: US-056875.  
 PR 22-AUG-1997: US-056876.  
 PR 22-AUG-1997: US-056877.  
 PR 22-AUG-1997: US-056878.  
 PR 22-AUG-1997: US-056879.  
 PR 22-AUG-1997: US-056880.  
 PR 22-AUG-1997: US-056881.  
 PR 22-AUG-1997: US-056882.  
 PR 22-AUG-1997: US-056884.  
 PR 22-AUG-1997: US-056886.  
 PR 22-AUG-1997: US-056887.  
 PR 22-AUG-1997: US-056888.  
 PR 22-AUG-1997: US-056889.  
 PR 22-AUG-1997: US-056892.  
 PR 22-AUG-1997: US-056893.  
 PR 22-AUG-1997: US-056894.  
 PR 22-AUG-1997: US-056903.  
 PR 22-AUG-1997: US-056908.  
 PR 22-AUG-1997: US-056909.  
 PR 22-AUG-1997: US-056910.  
 PR 22-AUG-1997: US-056911.  
 PR 05-SEP-1997: US-057650.  
 PR 05-SEP-1997: US-057761.  
 PR (HUMAN) HUMAN GENOME SCI INC.  
 PI Bednarik DP, Brewer LA, Carter KC, Duan R, Ebner R, Endress GA,  
 PI Feng P, Ferrite AM, Fischer CL, Graves KA, Greene JM, Hu JS,  
 PI Kyaw H, Lafleur DM, Li Y, Moore PA, Ni J, Olsen HS, Rosen CA,  
 PI Ruben SM, Shi Y, Soppet DR, Young PE, Yu GL, Zeng Z,  
 PI WPI: 98-609887/51.  
 DR P-PDB: W75091.  
 PT - Useful for diagnosis and treatment of e.g. cancers, neurological  
 PT disorders, immune diseases, inflammation or blood disorders  
 PS Claim 1: Page 190-191; 447pp; English.  
 CC This sequence represents a nucleic acid molecule which encodes a secreted  
 CC human protein. The gene number, and the clone it is derived from, are  
 CC detailed in the descriptor line. The gene can be used to generate fusion  
 CC proteins by linking to the gene to a human immunoglobulin Fc portion  
 CC (e.g. V415) for increasing the stability of the fused protein as  
 CC compared to the human protein only.  
 CC The invention relates to 70 novel genes and their fragments (nucleic acid  
 CC sequences: V34154-V34276; amino acid sequences W75057-W75179) which  
 CC are useful for preventing, treating or ameliorating medical conditions  
 CC e.g. by protein or gene therapy. Also, pathological conditions can be  
 CC diagnosed by determining the amount of the new polypeptides in a sample  
 CC or by determining the presence of mutations in the new polynucleotides.  
 CC Specific uses are described for each of the 70 polynucleotides, based on  
 CC which tissues they are most highly expressed in (see V34154 for described

CC (uses).  
 SQ Sequence 2378 BP; 518 A; 690 C; 662 G; 506 T;  
 Query Match 7.0%; Score 87; DB 1; Length 2378;  
 Best Local Similarity 62.4%; Pred. No. 1.8e-09;  
 Matches 169; Conservative 0; Mismatches 100; Indels 2; Gaps 2;  
 QY 323 CAGTCCGACCTTCCCTCCACATCCGATCCGCGGCGGACGAGCGGCGCTC 382  
 DB 113 CGCCTCAAGACCTTCAGCTCCAGAGCGATACAGCTGCTGCTG- AACGACGTCGCA 171  
 QY 383 CTTGAGCGCTGCGGCTTCATGCGGACCCCTGACGCTGACGCGGCGAGCGGCTG 442  
 DB 172 GTGCAGAGAGCGGCTTCTACGAGCCGACAGCGGCGGAGCGGAGCGGAGCTGCTC 231  
 QY 443 CGTCCGAGCCCGGTGGGACCTTCTGTTGGCGGACAG- TGTCAACGAGACTGCTTCT 501  
 DB 232 AGTCCGAGCCCGCGGCGGACCTTCTGATCCGACAGCTCGGACGAGCGGCGGAGCTTCT 291  
 QY 502 CGCGCTCAGCGTGAAGATGCTTGGGCGGCGGAGCATCCGCTGACTTCCAGCGCGG 561  
 DB 292 CAGGCTCAGCGTCAAGACCCAGCTGCGGACCAAGACCTGCCCATCCAGTGTGAGGGGG 351  
 QY 562 CGGCTTCACCTTGAGCGGCGGAGCGGAGAC 592  
 DB 352 CAGCTTCTCTGTCAGAGCGATCCCGGAGC 382  
 RESULT 9  
 T96002  
 ID T96002 standard; cDNA; 1374 BP.  
 AC T96002:  
 DT 07-JUL-1998 (first entry)  
 DE Human cytokine-inducible SH2-containing (CIS) gene.  
 KW Human cytokine-inducible SH2-containing; CIS; erythropoietin; EPO;  
 KW tyrosine-phosphorylated interleukin; (IL)-3; signal transduction;  
 KM Inhibition; anaemia; ss.  
 OS Homo sapiens.  
 FH Key Location/Qualifiers  
 FT CDS 71..848  
 FT /tag a  
 FT /product "Human CIS protein"  
 PN MO9744347-A1.  
 PD 27-NOV-1997.  
 PF 21-MAY-1996; U07477.  
 PR 21-MAY-1996; MO-U07477.  
 PA (HARD) HARVARD COLLEGE.  
 PI (SMIR) SMITHKLINE BEECHAM CORP.  
 PI Dunnington DD, Fiantz JD, Shoelson SE;  
 DR P-PDB: W38319.  
 PT Human cytokine-inducible SH2-containing protein and related DNA -  
 PT useful for diagnosis of modulators for treatment of, e.g. anaemia  
 PS Claim 1: Pages 34-35; 52pp; English.  
 CC This sequence encodes the human cytokine-inducible SH2-containing  
 CC (CIS) protein which binds tyrosine-phosphorylated interleukin  
 CC (IL)-3 or erythropoietin (EPO) receptors. When CIS is over expressed  
 CC signal transduction through the receptors is inhibited. Inactivation  
 CC of CIS may enhance signalling through (IL)-3 and EPO receptors.  
 CC Specific inhibitors of CIS may be useful in the treatment of anaemia.  
 CC Labelled CIS or its functional derivatives can be used in binding  
 CC assays to determine modulators of CIS activity. Conditions associated  
 CC with CIS protein deficiency can be diagnosed by assaying for the  
 CC presence of the CIS gene. It can be used to treat conditions related  
 CC to insufficient CIS protein function.  
 SQ Sequence 1374 BP; 264 A; 446 C; 379 G; 285 T;  
 Query Match 5.6%; Score 69.6; DB 1; Length 1374;  
 Best Local Similarity 51.3%; Pred. No. 6e-06;  
 Matches 162; Conservative 0; Mismatches 154; Indels 0; Gaps 0;

[illegible]

RESULT	10	
TA43380		
ID	TA43380	standard; cDNA; 1960 bp.
AC	TA43380;	
DT	11-MAR-1997	(first entry)
DE	Human cytokine response gene CR5.	
KW	Cytokine response gene; CR5; Interleukin-2; IL-2;	
OS	ligand-stimulated gene expression; diagnosis; therapy; ss.	
PH	Homo sapiens.	
FT	key	Location/Qualifiers
FT	cds	112..888
FT		/*tag= a
PN	W09639427-A1.	
PD	12-DEC-1996.	
PF	05-JUN-1995;	U09194.
PR	05-JUN-1995;	US-461379.
PR	05-JUN-1995;	US-465585.
PR	05-JUN-1995;	US-462337.
PR	05-JUN-1995;	US-463081.
PR	05-JUN-1995;	US-462390.
PR	05-JUN-1995;	US-463074.
PA	(DART-) DARTMOUTH COLLEGE.	
PI	Beadling C, Smith KA;	
DR	WPI: 97-043062/04.	
DR	P-FSDB: W08137.	
PT	Cytokine response proteins and genes - used in the detection and	
PT	therapy of diseases caused by a mutation in the CR coding region	
PS	Disclosure; Page 25-27; 81pp; English.	
CC	8 Clones (TA4337-83) contg. interleukin-2 (IL-2)-induced genes w	
CC	1 library following IL-2 stimulation. 6 of these ligand-induced ge	
CC	(CR1, 2, 3, 5, 6, 8) are novel. The CR5 gene encodes a 28 kDa	
CC	protein (W08137) that shows homology to src homology 2 (SH2)	
CC	domains. CR5 expression is markedly induced during IL2-promoted	
CC	T-cell proliferation. CR genes and polypeptides (W08133-40) are	
CC	useful as diagnostic or therapeutic agents; CR gene sequences can	
CC	be used to detect and treat allelic mutations.	
CC	Sequence 1960 bp; 402 A; 622 C; 523 G; 413 T;	

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Query Match: 5.6%; Score 69.6; DB 1; Length 1960;
Best Local Similarity 51.3%; Pred. NO. 6.5e-05;
Matches 162; Conservative 0; Mismatches 134; Indels 0; Gaps 0;
QY 303 CCCGAGCCCTGGGACACACTCTTCGCGACCTTCGCTCCCACTCCGATTAACGGCGCA 362
      ||| |||||
Db 260 CCCGAGCCCTGACAGAGAGTGAAGCCAAAGGTCTGTGACCCGAGAGAGATCTGCTGTGCA 319
      ||| |||||

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QY 363 TCACCGGGACCAAGCGCGCTCCTGGAGCGCTTCGAGCTTCATTTGGGAGACCCCTAGCGTGC 422

Db 320 TAGCCAAAGACCTCTCTCCCTACCTTGGGGAAATGTGGCTGTATGGGGTTTCATTACGGCCA 379

QY 423 ACGGGGCGCACAGAGCGGCGTGCSTGCCGAGCCCGTGGGACACTTCTTGTCGGGAGACATC 482

Db 380 GCGAGGCGCCGCAACACCTCGCAGAAAGATCCAGAAAGCGACGTTCTTAGTACGTGACAGCA 439

QY 483 GTCAACGGAGACTCGTCTCTTCGCGGTCACTAGCGTGAAGATGCGTTGGGGCCCCACAGACATCC 542

Db 440 CGCACCCCACTACCTGTTCTACGCTGTCAAGTGAAGAAACCACTGCTGCGCCCAACAATGTAC 499

QY 543 GCGTGCACCTTCAGAGCGCGCGCTCTCACTTGGACGCGACGCCGAGACCTTGCAGTGC 602

Db 500 GCATTGAAATGACGCGACCTCCAGCTTCGCTGTGGACCTCCAACTGCTGTGTCCAGGCCACGCA 559

QY 603 TTTTCGAGCTGCTGGA 618

Db 560 TCTGTGGCTTTCGGGA 575

RESULT 11	
ID	X53491/c
AC	X53491 standard; DNA: 114955 BP.
DT	05-JUL-1999 (first entry)
DE	Human adenovase A1 receptor antisense oligonucleotide fragment.
KW	Antisense oligonucleotide; multiple target; antisense treatment;
KW	Impaired respiration; inflammation; lung disease;
KW	pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW	acute asthma; allergy; asthma; impeded respiration;
KW	respiratory distress syndrome; pain; cystic fibrosis;
KW	pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW	chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW	colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW	hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW	prostate cancer; ss.
OS	Synthetic.
PN	MO9913866-A1.
PD	25-MAR-1999.
PF	17-SEP-1998; UI9419.
PR	09-JUN-1998; US-093972.
PR	17-SEP-1997; US-059160.
PA	(UYEC-) UNIV EAST CAROLINA.
PI	Nyce JW;
DR	Wpi: 99-2296400/19.
PT	New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT	vasoconstriction
PS	Disclosure; Page 37; 120pp; English.
CC	The specification describes antisense oligonucleotides (X52869-X55271)
CC	directed against at least 2 mRNAs selected from target genes, coding and
CC	non-coding regions of RNAs corresponding to target genes, gene
CC	initiation codons, genomic flanking regions, intron-exon borders, the
CC	5'-end, the 3'-end and the junction between coding and non-coding
CC	regions and all segments of RNAs encoding proteins associated with one
CC	or more diseases, conditions or mixtures. The antisense oligonucleotides
CC	may be derived from sequences X55272-74. These multiple target
CC	oligonucleotides (specifically X55180-271) can be used for the antisense
CC	treatment of diseases and conditions. Typical diseases and conditions
CC	are those associated with impaired respiration and inflammation,
CC	including lung diseases, pulmonary vasoconstriction, inflammation,
CC	allergic rhinitis, acute asthma, allergies, asthma, impeded respiration,
CC	respiratory distress syndrome, pain, cystic fibrosis, pulmonary
CC	hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive
CC	pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC	carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic
CC	cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic
CC	metastases, as well as all types of cancers which may metastasize or have
CC	metastasized to the lungs, including breast and prostate cancer.
CC	Sequence 114955 BP: 6071 A; 29417 G; 21328 T;
CC	36712 G;

Query Match	5.28; Score 64.4; DB 1; Length 114955;
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[illegible]

FT	CDS	33140..34984	/tag- ad	/product- "ORF#22a protein"	/note- "encoded protein shown in W72225"
FT	CDS	33586..34984	/tag- ae	/product- "ORF#22b protein"	/note- "encoded protein shown in W72227"
FT	CDS	33930..39935	/tag- af	/product- "ORF#24 protein"	/note- "encoded protein shown in W72189"
FT	CDS	39935..42206	/tag- ah	/product- "ORF#25 protein"	/note- "encoded protein shown in W72190"
FT	CDS	40216..41973	/tag- ai	/product- "ORF#26 protein"	/note- "encoded protein shown in W72191"
FT	CDS	42206..44178	/tag- aj	/product- "ORF#27 protein"	/note- "encoded protein shown in W72192"
FT	CDS	44178..44853	/tag- ak	/product- "ORF#28 protein"	/note- "encoded protein shown in W72193"
FT	CDS	44853..47122	/tag- al	/product- "ORF#29 protein"	/note- "encoded protein shown in W72194"
FT	CDS	47122..47338	/tag- am	/product- "ORF#30 protein"	/note- "encoded protein shown in W72195"
FT	CDS	47338..49662	/tag- an	/product- "ORF#31 protein"	/note- "encoded protein shown in W72196"
FT	CDS	49662..51666	/tag- ao	/product- "ORF#32 protein"	/note- "encoded protein shown in W72197"
FT	CDS	51666..54393	/tag- ap	/product- "ORF#33 protein"	/note- "encoded protein shown in W72198"
FT	CDS	54393..58151	/tag- aq	/product- "ORF#34 protein"	/note- "encoded protein shown in W72199"
FT	CDS	58151..60760	/tag- ar	/product- "ORF#35 protein"	/note- "encoded protein shown in W72200"
FT	CDS	60760..61151	/tag- as	/product- "ORF#36 protein"	/note- "encoded protein shown in W72201"
FT	CDS	61151..61241	/tag- at	/product- "ORF#37 protein"	/note- "encoded protein shown in W72202"
FT	CDS	61241..62521	/tag- au	/product- "ORF#38 protein"	/note- "encoded protein shown in W72203"